

APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

2. Type of Application:

- ☐ New  
☒ Continuation  
☐ Revision

If Revision, select appropriate letter(s)

Other (specify):

3. Date Received

08/06/2013

4. Applicant Identifier:

5a. Fed Entity Identifier:

5b. Federal Award Identifier:

DE-EE0006139

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

a. Legal Name: Governor's Office of Energy Policy

b. Employer/Taxpayer Identification Number (EIN/TIN):

866004791

c. Organizational DUNS:

039149351

d. Address:

Street 1: 1700 W Washington, Suite 250

Street 2:

City: Phoenix

County: MARICOPA County

State: AZ

Province:

Country: U.S.A.

Zip / Postal Code: 85007

e. Organizational Unit:

Department Name:

Arizona Governor's Office

Division Name:

Office of Energy Policy

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Ms First Name: Linda

Middle Name:

Last Name: Brumm

Suffix:

Title: Fiscal Manager

Organizational Affiliation: Governor's Office of Energy Policy

Telephone Number: 6027711146

Fax Number: 6027711203

Email: lbrumm@az.gov

APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

9. Type of Applicant:

A State Government

10. Name of Federal Agency:

U. S. Department of Energy

11. Catalog of Federal Domestic Assistance Number:

81.042

CFDA Title:

Weatherization Assistance Program

12. Funding Opportunity Number:

DE-WAP-0002015

Title:

2015 Weatherization Assistance Funding Opportunity

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Statewide

15. Descriptive Title of Applicant's Project:

Low-Income Weatherization Program

APPLICATION FOR FEDERAL ASSISTANCE SF-424

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16. Congressional District Of:

a. Applicant: Arizona Congressional District 04

b. Program/Project: AZ-Statewide

Attach an additional list of Program/Project Congressional Districts if needed:

17. Proposed Project:

a. Start Date: 07/01/2015

b. End Date: 06/30/2016

18. Estimated Funding (\$):

a. Federal	997,822.00
b. Applicant	0.00
c. State	0.00
d. Local	0.00
e. Other	0.00
f. Program Income	0.00
g. TOTAL	997,822.00

19. Is Application subject to Review By State Under Executive Order 12372 Process?:

- ☒ a. This application was made available to the State under the Executive Order 12372 Process for review on: 04/30/2015
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☐ c. Program is not covered by E.O. 12372

20. Is the applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation)

No

21. By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code Title 218, Section 1001)

☐ I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr First Name: Chris

Middle Name:

Last Name: McIsaac

Suffix:

Title: Policy Advisor for Energy and Environment

Telephone Number: 6025423424

Fax Number:

Email: cmcisaac@az.gov

Signature of Authorized Representative:

Date Signed:

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)  
Prescribed by OMB Circular A-102

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0006139		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Governor's Office of Energy Policy 1700 W Washington, Suite 250 Phoenix, AZ 85007		4. Program/Project Start Date 07/01/2015	5. Completion Date 06/30/2016

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Federal	81.042	\$ 11,916.00		\$ 997,822.00		\$ 1,009,738.00
2.						
3.						
4.						
5. TOTAL		\$ 11,916.00	\$ 0.00	\$ 997,822.00	\$ 0.00	\$ 1,009,738.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTR ATION	(2) SUBGRANTE E ADMINISTR	(3) GRANTEE T&TA	(4) SUBGRANT EE T&TA	
a. Personnel	\$ 19,404.00	\$ 0.00	\$ 37,930.00	\$ 0.00	\$ 57,334.00
b. Benefits	\$ 7,568.00	\$ 0.00	\$ 14,793.00	\$ 0.00	\$ 22,361.00
c. Travel	\$ 1,630.00	\$ 0.00	\$ 8,562.00	\$ 0.00	\$ 10,192.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
f. Contract	\$ 0.00	\$ 92,358.00	\$ 5,000.00	\$ 98,582.00	\$ 854,350.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other	\$ 2,525.00	\$ 0.00	\$ 11,225.00	\$ 0.00	\$ 13,750.00
i. Total Direct Charges	\$ 31,127.00	\$ 92,358.00	\$ 77,510.00	\$ 98,582.00	\$ 957,987.00
j. Indirect	\$ 18,763.00	\$ 0.00	\$ 32,988.00	\$ 0.00	\$ 51,751.00
k. Totals	\$ 49,890.00	\$ 92,358.00	\$ 110,498.00	\$ 98,582.00	\$ 1,009,738.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0006139		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Governor's Office of Energy Policy 1700 W Washington, Suite 250 Phoenix, AZ 85007		4. Program/Project Start Date 07/01/2015	5. Completion Date 06/30/2016

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 11,916.00	\$ 0.00	\$ 997,822.00	\$ 0.00	\$ 1,009,738.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) PROGRAM OPERATION S	(2) FINANCIAL AUDITS	(3) LIABILITY INSURANCE	(4) HEALTH AND SAFETY	
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 57,334.00
b. Benefits	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 22,361.00
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 10,192.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
f. Contract	\$ 541,754.00	\$ 7,140.00	\$ 10,754.00	\$ 98,762.00	\$ 854,350.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 13,750.00
i. Total Direct Charges	\$ 541,754.00	\$ 7,140.00	\$ 10,754.00	\$ 98,762.00	\$ 957,987.00
j. Indirect	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 51,751.00
k. Totals	\$ 541,754.00	\$ 7,140.00	\$ 10,754.00	\$ 98,762.00	\$ 1,009,738.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
WEATHERIZATION ANNUAL FILE WORKSHEET

(Grant Number: EE0006139, State: AZ, Program Year: 2015)

## IV.1 Subgrantees

Subgrantee (City)	Planned Funds/Units
CAHRA (Eloy)	\$39,550.00 4
City of Phoenix, Municipal Building (Phoenix)	\$124,463.00 17
Gila County Community Action (Globe)	\$30,547.00 4
Maricopa County Government (Phoenix)	\$204,848.00 28
MesaCAN (Mesa)	\$26,366.00 3
NACOG (Flagstaff)	\$129,222.00 17
Pima County (Tucson)	\$29,880.00 3
SEACAP (Safford)	\$80,433.00 9
Tucson Urban League (Tucson)	\$82,060.00 11
WACOG (Yuma)	\$101,981.00 13
<b>Total:</b>	<b>\$849,350.00</b> <b>109</b>

## IV.2 WAP Production Schedule

Weatherization Plans	Units
Total Units (excluding reweatherized)	109
Rewatherized Units	0
Note: Planned units by quarter or category are no longer required, no information required for persons.	

Average Unit Costs, Units subject to DOE Project Rules		
VEHICLE & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)		
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B	Total Units Weatherized	109
C	Total Units Reweatherized	00
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	109
E	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00
AVERAGE COST PER DWELLING UNIT (DOE RULES)		
F	Total Funds for Program Operations	\$541,754.00
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	109
H	Average Program Operations Costs per Unit (F divided by G)	\$4,970.22
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J	Total Average Cost per Dwelling (H plus I)	\$4,970.22

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WEATHERIZATION ANNUAL FILE WORKSHEET

(Grant Number: EE0006139, State: AZ, Program Year: 2015)

IV.3 Energy Savings

Method used to calculate savings: ☒ WAP algorithm ☐ Other (describe below)

Method used to calculate savings description:

Production and Energy Savings

These are estimates for PY15

Total Units (excluding reweatherized) 109

Rewatherized Units 0

Method used to calculate energy savings: WAP algorithm: ☒ other (describe below):

Estimated energy savings (Mbtus):  $109 \times 30.5 \text{ MBTU} = 3324.5 \text{ MBTU} = 974.4 \text{ KW} = 33.2 \text{ Therms}$

This year estimated energy savings (Mbtus): 3,324

Prior year estimated energy savings (Mbtus): 4,880 Actual:

IV.4 DOE-Funded Leveraging Activities

The state does not utilize funds for leveraging activities. However, parallel programs are run through LIHEAP and utility funding.

IV.5 Policy Advisory Council Members

☐ Check if an existing state council or commission serves in this category and add name below

Arizona Community Action Association (ACAA)	Type of organization: Non-profit (not a financial institution) Contact Name: Cynthia Zwick, Executive Director Phone: (602)604-0640 Email: <a href="mailto:czwick@azcaa.org">czwick@azcaa.org</a>
Arizona Public Interest Research Group (AZ-PIRG)	Type of organization: Other Contact Name: Diane E. Brown Phone: (602)252-9227 Email: <a href="mailto:dbrown@arizonapirg.org">dbrown@arizonapirg.org</a>
Arizona Public Service Company	Type of organization: Utility Contact Name: Jerry Mendoza, Account Executive Marketing Programs Phone: 6022502243 Email: <a href="mailto:jerardo.mendoza@aps.com">jerardo.mendoza@aps.com</a>
Foundation for Senior Living	Type of organization: Non-profit (not a financial institution) Contact Name: Carrie Smith, Chief Operating Officer Phone: 6022850505 Email: <a href="mailto:csmith@fsl.org">csmith@fsl.org</a>
Gila County Community Action	Type of organization: Unit of Local Government Contact Name: Malissa Buzan, Community Action & Housing Services Manager Phone: 9284028693 Email: <a href="mailto:mbuzan@co.gila.az.us">mbuzan@co.gila.az.us</a>
Maricopa County	Type of organization: Unit of Local Government Contact Name: Amy Jacobson, Assistant Director Phone: 6023721528 Email: <a href="mailto:jacobsona@mail.maricopa.gov">jacobsona@mail.maricopa.gov</a>

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(Grant Number: EE0006139, State: AZ, Program Year: 2015)

NACOG	Type of organization: Local agency Contact Name: Mr. Bob Baca, Operations director Phone: 9287743756 Email: <a href="mailto:bbaca@nacog.org">bbaca@nacog.org</a>
Salt River Project	Type of organization: Utility Contact Name: Bonnie Temme, Community Relations Program Manager Phone: 6022369915 Email: <a href="mailto:Bonnie.Temme@srpnet.com">Bonnie.Temme@srpnet.com</a>
Southwest Gas Corporation	Type of organization: Utility Contact Name: Celine Apo, Analyst II/Energy Efficiency Phone: 7028767149 Email: <a href="mailto:celine.apo@swgas.com">celine.apo@swgas.com</a>
Tucson Electric Power Company	Type of organization: Utility Contact Name: Jessica Vega, Contract Administrator Phone: 5209915774 Email: <a href="mailto:JVega@tcp.com">JVega@tcp.com</a>

**IV.6 State Plan Hearings (Note: attach notes and transcripts to the SF-424)**

Date Held	Newspapers that publicized the hearings and the dates the notice ran
05/26/2015	The Public Hearing was posted April 17, 2015 on the Arizona Department of Administration (ADOA) website. The date, time, and location of the Public Hearing is also provided to sub-grantees and interested parties through email and at <a href="http://www.azenergy.gov">www.azenergy.gov</a> website.

**IV.7 Miscellaneous**

**Use of Weatherization Funds for Renewable Energy Systems**

10 CFR §440.18 (Allowable Expenditures) incorporates the renewable energy system provisions and specifies a ceiling of \$3,000 per dwelling for labor, weatherization materials, and related matters. The current adjusted value is \$3,545 for renewable energy systems with a SIR greater than 1.

Because the total average cost per unit exceeds the renewable measures allowance, the major effects of the regulation are to provide criteria and a procedure for integrating renewables into the WAP, and to establish a process for evaluating petitions to use new or innovative renewable energy systems in the WAP.

Section 440.21(c) (1) specifies performance and quality standards criteria for renewable energy systems. Paragraph (c) (2) establishes a procedure for submission and action on petitions by manufacturers requesting the Secretary of Energy to certify a new technology or system as an eligible renewable energy system.

Approved renewable energy systems will be listed in Appendix A of Part 440, Standards for Weatherization Materials.

**Carry over Rule**

**\*\*\*This rule only applies if DOE allows OEP to carry over any remaining funds from the previous program year.**

OEP concurs with DOE that funds allocated for a specific year should be spent in that year. OEP will adopt a policy if any agency that does not spend out at least 90% of their allocated funds for a given year, that agency will not be allowed to carry over any remaining funds. All agencies that spend out 90% or better of their allocated funds will be allowed to carry over any remaining allocated funds.

The remaining funds from the agencies that did not meet the 90% or better mark, will be pooled together and reallocated. The funds will be split equally among the agencies that did meet the 90% expenditure requirement.

Business Officer: Linda Brumm, Fiscal Manager, [lbrumm@az.gov](mailto:lbrumm@az.gov), 602-771-1146

Principle Investigator: Michael Frary, Manager, Building and Science Efficiency, [mfrary@az.gov](mailto:mfrary@az.gov), 602-771-1148



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WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006139, State: AZ, Program Year: 2015)

This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

**V.1 Eligibility**

**V.1.1 Approach to Determining Client Eligibility**

Provide a description of the definition of income used to determine eligibility

- The sub-grantees are to follow the state guidelines for Low-Income Home Energy Assistance Program (LIHEAP) Policy Manual requirements for income eligibility up to 200% of Federal Poverty Guidelines and allowable documents as proof of income as it pertains to the Weatherization program, copies of the manuals are provided by Arizona Department of Economic security (DES).
- Sub-grantee should also reference WPN 14-3 in WAPTAC
- Each client file must contain an application from the client that contains the required demographics and income for the entire family living in the residence. The file must also contain evidence provided by the sub-grantee that the client is eligible to receive WAP services. This evidence may include, but is not limited to, a memorandum from a third party certification office stipulating the income levels of the family or source documentation for each income source listed on the application. These documents can be stored electronically or retained in hard copy for each client.
- For HUD-DOE Multi-Family eligibility see Multi Family section of plan

**Outreach**

Primary outreach activities to promote the Weatherization Program to qualified clients are the responsibility, at a local level, of the sub-grantees. This is at the request of the sub-grantees as they know their work load capabilities and too much outreach can over load their capabilities and create a long wait list, if they don't have one already.

Describe what household Eligibility basis will be used in the Program

Every dwelling weatherized must meet both client eligibility and the building eligibility requirements.

**Arizona definition of low-income:**

Household Income is at or below 200% of the federal poverty level determined in accordance with criteria established by the Office of the Secretary, U.S. Department of Health and Human Services.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

Grantees are directed and encouraged to review guidance provided by Health and Human Services (HHS) under LIHEAP. This guidance can be found by going to <http://www.aspe.hhs.gov/hsp/immigration/restrictions-sum.shtml#sec1>.

HHS Information Memorandum LIHEAP-IM-25 dated August 28, 1997, states that all qualified aliens, regardless of when they entered the United States, continue to be eligible to receive assistance and services under the Low-Income Home Energy Assistance Program (LIHEAP) if they meet other program requirements.

To eliminate any possible contradiction of eligibility for Weatherization services at the state and local level for qualified aliens, the definition adopted by HHS will also apply to the DOE WAP.

HHS issued Information Memorandum LIHEAP-IM-98-25 dated August 6, 1998, outlining procedures for LIHEAP and Weatherization grantees serving non-qualified aliens to implement new status verification requirements.

To ensure continuity between LIHEAP and WAP for the many sub-grantees operating both programs, the DOE WAP will follow the interpretation as adopted by HHS.

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**V.1.2 Approach to Determining Building Eligibility**

Procedures to determine that units weatherized have eligibility documentation

**Sub-grantees must:**

- Verify that the home's occupants are income qualified for WAP
- Verify to the best of their means that the home has not been weatherized before by filling out the state's re-weatherization check list which includes the following:
  - The state database
  - The past files
  - The past home's tracking methods
  - Visual inspection of unit
  - Any other means at their disposal
- Perform a site inspection of the unit to make sure the condition of the home is safe to perform weatherization work

**The Grantee will verify by:**

- Performing 100 percent desk top review of jobs submitted to the state's database, which helps verify income levels
- During field inspections, check that the proper documentation is in the files for income verification and that the client meets income eligibility
- Check that the state re-weatherization checklist document is in the file and signed
- Inspect the home to make sure that it was in safe condition to work in

Describe Reweatherization compliance

The Recovery Act amended the DOE Weatherization Re-weatherization dates and now allows grantees and sub-grantees to weatherize homes previously weatherized from September 30, 1994, and earlier. This provision gives grantees the flexibility to revisit those homes weatherized prior to 1994 that may not have received the full complement of weatherization services, including the use of an advanced energy audit or addressing health and safety concerns. DOE reminds grantees and sub-grantees that in selecting previously weatherized homes to revisit, there still remain more than 34 million federally eligible households that have received no weatherization services to date. Under Energy Crisis and Disaster Relief of this guidance, it addresses Disaster Planning and Relief and references DOE-issued Weatherization Program Notice 12-7, which allows additional work to be done on homes due to natural disasters. Please refer to these sections and follow appropriate procedures if the grantee wishes to serve homes located in disaster areas.

**Use of WAP Funds for Add-on/Call-back Work**

Grantees and sub-grantees may not charge the WAP for additional work on homes that have already been reported to DOE as completed, weatherized units. WPN 11-03 provides specific guidance on this type of activity.

Note: Under no circumstances can any of these activities be covered under the re-weatherization provisions of 10 CFR §440.18(e) (2) (iii).

Describe what structures are eligible for weatherization

Eligible structures are deemed to be fit for weatherization if they have income qualifying occupants. Also, the structure must be safe for the occupants; sub-grantee's crews and/or contractors to work in without concern for their health and safety.

Sub-grantees should exercise caution in dealing with non-traditional type dwelling units such as shelters, and apartments over businesses, etc., to ensure they meet program regulations on whether the unit is, in fact, eligible. Consideration on weatherizing these types of units should be coordinated with the OEP.

The weatherization of non-stationary campers, trailers and RV's that have an eligible applicant/s is not allowed.

Describe how Rental Units/Multifamily Buildings will be addressed

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**\*\*\*All sub-grantees are required to weatherize single family and multi-family rental housing.**

The State of Arizona has established a policy to ensure that sub-grantees weatherizing rental units determine financial eligibility and obtain written permission of the owner or his agent. In multiple unit buildings the state ensures 66 percent (50 percent for duplexes or four unit buildings) of the building to be eligible units. The State's policy also ensures that the benefits of weatherization accrue primarily to the tenant, including units where the tenants pay for their energy through their rent. The state recognizes that it may weatherize shelters under conditions set forth in CFR 440.22.

State policy for rental units states that for a reasonable period of time, not less than twelve months, the tenant will not be subjected to rent increases unless those increases can be demonstrated to be related matter and conditions other than the weatherization measures performed. State policy also provides an avenue for complaint in such matters. Tenants and landlords are informed in writing that no undue or excessive enhancement shall be provided to the rental unit or building by weatherization assistance, this is to include the installation of heating and air conditioning units, and appliances, as this is required by landlord pursuant to A.R.S 33-1324:

<http://www.Arizonaleg.state.Arizona.us/ars/33/01324.htm>

If a multi-unit building is under an assisted or public housing program and is identified by the U.S. Department of Housing and Urban Development (HUD), and included on a list published by DOE, that building will meet certain income eligibility requirements, and will also satisfy one or both of the procedural requirements to protect against rent increases and undue or excessive enhancement of the weatherized building, as indicated by the list, under the Weatherization Assistance Program without the need for further evaluation or verification as stated in WPN 10-15-  
<http://www.waptac.org/Program-Guidance/2010002D2006-Program-Guidance-Documents.aspx>

**Leased Dwelling Units**

- No leased/rented dwelling unit shall be weatherized without first obtaining the written permission for the owner of the dwelling unit or the agent;
- The benefits of weatherization assistance shall accrue primarily to the low-income tenants;
- Rent shall not be raised because of the weatherization assistance provided by this grant; and
- No undue or excessive enhancement will occur to the value of the dwelling units. This is to include the installation of heating and air conditioning units, as this is required by the landlord pursuant to A.R.S 33-1324: <http://www.Arizonaleg.state.Arizona.us/ars/33/01324.htm>
- Signed statements will be obtained from the owners or their agents certifying that rents will not be raised because of work done as a result of this assistance.
- All documentation shall remain the property of OEP and in the event of program closure, either by OEP or the sub-grantee, such files shall revert to OEP. Copies of these documents need to be placed in each client file of the complex.

Note: Grantees and sub-grantees are reminded that the supporting documentation for applicants applying for weatherization that may be on a waiting list or for other reasons must have their eligibility documentation updated every 12 months from the date of the initial intake date.

Certain buildings containing rental units may comply with the income eligibility requirements when 50 percent of those dwelling units are eligible dwelling units rather than the established 66 percent identified in the regulation. (10 CFR§ 440.22(b) (2)). The buildings that are subject to the 50 percent threshold are duplexes, four-unit buildings, and certain eligible types of large multi-family buildings. In the final rule published on December 8, 2000, DOE provided guidance on what types of large multi-family buildings may be subject to the 50 percent threshold. (65 Fed. Reg. 77210, Dec. 8, 2000.)

DOE indicated that "certain eligible types of large multi-family buildings" are those buildings for which an investment of DOE funds would result in a significant energy-efficiency improvement because of the upgrades to equipment, energy systems, common space, or the building shell. (Id. at 77215) By providing this flexibility, sub-grantees are better able to select the most cost-effective investments and enhance their partnership efforts in attracting leveraged funds and/or landlord contributions. This flexibility does not apply to any other type of multifamily unit. Questions on whether a building meets the criteria should be directed to the DOE Project Officer.

The definition of "significant energy improvement" is based on specific criteria for the building in question. This must be assessed using existing conditions to determine the threshold to achieve significant energy improvements. Grantees should consult with their DOE Project Officer if there are questions related to this threshold. Additional guidance is being considered by DOE to provide Grantees criteria for what constitutes "significant energy improvement."

As a reminder, when addressing multi-family units with DOE funds, multiply the total number of income-eligible units in the multi-family building by the current allowable per dwelling unit average cost to determine the amount of DOE funding available for weatherizing the building. While the amount of funding available for weatherizing a building is limited by the number of eligible units, the weatherization work can result in improvements to all units in the building, even those that are not eligible units. All units should be reported to DOE.

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Note: Grantee and sub-grantee agencies should exercise caution when utilizing flexibility in this area. The key is the investment of DOE funds coupled with leveraged resources which result in significant energy savings. Absent this investment, lowering the eligibility to 50% may lead to disallowed costs. Sub-grantees who are uncertain on a given multi-family project should seek approval by the DOE Project Officer through their Grantee Weatherization Program Manager.

Note: DOE issued the following Program Notices on multi-family related issues: WPN 10-15, Final Rule on Amending Eligibility Provisions to Multi-Family Buildings for the Weatherization Assistance Program; WPN 10-15A, Guidance Regarding Accrual of Benefits to Low-Income Tenants in Multi-Family Buildings under the Weatherization Assistance Program; and WPN 10-17, Guidance on Using Non-Federal Resources as a Buy-Down for Meeting the Savings-to-Investment Ratio for Materials Used in the Weatherization Assistance Program.

Describe the deferral Process

The decision to defer work in a dwelling is difficult, but necessary, in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. Note that subgrantees, including crews and contractors, are expected to pursue reasonable options on behalf of the client, including referrals, and to use good judgment in dealing with difficult situations.

When sub-grantees have determined a home to be deferred, they will:

- Inform the client in writing as to why the dwelling cannot be weatherized. If there are conditions that the client must correct before service is provided, those conditions must also be stated in writing.
- Refer the client to any alternate program such as home rehab, if one is available in the area.
- Clearly indicate in the client file why the dwelling was given "deferral" status.
- Document all referrals to other programs or services in the client file.
- Provide the client any information prescribed in the Health and Safety section that is appropriate.

Deferral condition may include, but not limited to:

- The client has known health conditions that prohibit the installation of insulation and other weatherization materials.
- The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively.
- The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if weatherization work were performed.
- The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
- Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs.
- Dangerous conditions exist due to high carbon monoxide levels in combustion appliances, and cannot be resolved under existing health and safety measures.
- The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
- The extent and condition of lead-based paint in the house would potentially create further health and safety hazards.
- In the judgment of the energy auditor, any condition exists which may endanger the health and/or safety of the work crew or subcontractor, the work should not proceed until the condition is corrected.

Each sub-grantee is to have an appeal process in place if any client is denied services, rent is increased on a weatherized rental property or other concerns or issues about WAP. The process must be given to the client in writing, at the time of intake. This process will be verified during fiscal monitoring of the sub-grantees.

**V.1.3 Definition of Children**

Definition of children (below age): 18

**V.1.4 Approach to Tribal Organizations**

☒ Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

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Currently the Navajo Nation and ITCA receive direct funding for weatherization from the U.S. Department of Energy. Arizona recommends that the Golden Field Office (GFO) keeps funding the Navajo Nation and ITCA directly, as the Low-income members of an Indian Tribe will receive benefits equivalent to the assistance provided to other low-income persons within the State of Arizona. There will be no concerns of discrimination in benefits because the grantee and the applicant are members of an Indian Tribe.

#### V.2 Selection of Areas to Be Served

Arizona utilizes 10 local Weatherization agencies to fully implement the State Plan and provide services to the eligible population of Arizona, excluding the Tribal Nations. Project service areas are historical in nature, originating many years ago at the time of community action agency establishment in Arizona. Service area boundaries are typically drawn along county lines or tribal land boundary lines.

Individual sub-grantees are selected on the basis of their:

- Experience and performance in Weatherization or housing renovation activities;
- Experience in assisting low-income persons in the area to be served; and
- Capacity to undertake a timely and effective Weatherization Program.
- Preference is given to any Community Action Agency or other public or non-profit entity, which has, or is currently administering an effective program under 10 CFR 440.15 or under Title II of the Economic Opportunity Act of 1964, with program effectiveness evaluated by consideration of factors including, but not necessarily limited to the following:
  - The extent to which the past or current program achieved or is achieving Weatherization goals in a timely fashion;
  - The quality of the work performed by the sub-grantee;
  - The number, qualifications and experience of staff members of the sub-grantee
- Any new or additional sub-grantee shall be selected at a public hearing and must meet the above criteria

All sub-grantees are agencies which meet the requirements of 10 CFR 440.15 and which have been selected based upon on-site inspections made by OEP staff, as well as on transcripts of the public hearing which affirm that there are no public objections to any of the sub-grantees selected.

The ten sub-grantees chosen to perform weatherization work can be located in the annual file under sub-grantees.

#### V.3 Priorities for Service Delivery

- Elderly
- Handicapped
- Families with children
- Weatherization Waiting List - An actual waiting list to determine who is next to receive weatherization services must be developed with priority given to: elderly (60 years of age and older), disabled, and households with children. The criteria used for determining applicant priority must be in writing and on file with the sub-grantee.

#### V.4 Climatic Conditions

The climate conditions for Arizona range from low dry aired desert to mountain/alpine cold. The summer months of the desert from June through September will bring a dry heat ranging from 90-120 °F (32-49 °C), with occasional high temperatures exceeding 125 °F (52 °C) having been observed. The winter months of the plateau and High Mountain/alpine range of the state, extremely cold temperatures are not unknown; cold air systems from the northern states and Canada occasionally push into the state, bringing temperatures below 0 °F (-18 °C) to the northern parts of the state.

Note: Arizona WAP will use the 2009 IECC climate zones. This will clearly define the different climate zone regions and reduce any confusion regarding location and minimize any conflicts that may arise in the event that local municipalities adopt future building codes. For climate zone map, please reference <http://www.energycode.pnl.gov/EnergyCodeReqs/?state=Arizona>

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## V.5 Type of Weatherization Work to Be Done

### V.5.1 Technical Guides and Materials

Achieving an energy-efficient house is really a question of doing a few things very well and understanding that the house is a system, with all components of the house working together. The following are the areas we concentrate on:

- Getting the home tight (air sealing)
- Insulating the home right (focus on insulation performance, not just R-value)
- Dealing with sunlight (shade screens and reflective coatings)
- Correctly installing efficient equipment (duct sealing, pressure balanced, air flow, sizing and charge)
- Base loads (refrigerators, CFL)

#### Technical Guides and Materials

OEP, with the help of the SouthWest Building Science Training Center (SWBSTC) has developed Arizona's Weatherization Field Guide to be in compliance with WPN15-4. The field guide will be distributed to all sub-grantees by June 30, 2015. They will receive a hard copy, digital copy and a web address where the guide can be accessed on-line. Upon receiving the field guide, the sub-grantee will have to sign a document that states they received it and they will be held accountable to make sure all weatherization work meets or exceeds the standards set forth. This document must be put in their file and updated annually. The field guide will be given to the sub-grantees in one of two ways; either by a group meeting or by individual sub grantee meetings, depending on staffing with OEP.

Beginning in program year 15 and moving forward, OEP will ensure that sub-grantees are providing their contractors with the required information on their expectation of work quality, and program guidance by including the following language in their contract:

- As a sub-grantee, it is required that on an annual basis your contractors are informed of the standards they will be held to, set forth by the Arizona Weatherization field guide and the Standard Work Specifications. It must be signed off by an authorized employee of the company
- All energy audits performed by the sub-grantee or it's contractor will meet or exceed the requirements set forth in WPN 13-5

During fiscal monitoring, OEP will ensure that the language and required signatures for the field guide are in the sub-grantee contractor files.

Materials used for weatherization must meet 10 CFR 440, Appendix A to Part 440—Standards for Weatherization Materials. This can be found at <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=23fe3d3cfcc461955f6c730af864c7c7;rgn=div5;view=text;node=10%3A3.0.1.4.24;idno=10;cc=ecfr#10:3.0.1.4.24.0.85.22.50>

### V.5.2 Energy Audit Procedures

#### Audit Procedures and Dates Most Recently Approved by DOE

<b>Single-Family :</b>	Arizona WAP will follow the priority list approved by DOE in September 2011 and in the event that a measure is not on the Priority List, REM Design will be utilized to determine cost effectiveness.
<b>Manufactured Housing :</b>	Arizona WAP will follow the priority list approved by DOE in September 2011 and in the event that a measure is not on the Priority List, REM Design will be utilized to determine cost effectiveness.
<b>Multi-Family :</b>	Arizona WAP currently does not have a multifamily audit. REM Design will be utilized for buildings that are 25 units or smaller and any building greater than 25 units subgrantees will provide necessary information to the State & DOE for approval.

#### Comments

The WAP Energy Audit Procedure must be used by all sub-grantees to gather, record and analyze data on structures. This data must be used to deliver weatherization materials/measures in a fashion that protects the health and safety of the client, increases the durability of the structure, increases the comfort of the client and reduces the energy cost to the client in a cost effective manner.

The following audit activities must be completed on all homes utilizing WAP funds.

- A site audit is to be completed, that meets WPN 13-5 requirements, and records all of the relevant data on the structure that is needed to perform cost effectiveness tests
- The Cost Effectiveness Procedure must be followed to determine cost effectiveness of potential weatherization materials/measures

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- The Pressure Diagnostic Procedure must be completed and the findings documented following the Reporting Procedures
- A health and safety audit of the structure must be completed and the findings documented following the Reporting Procedures
- A final inspection of the structure must be completed and findings documented following the Final Inspection Procedures

The following is the state approved priority list, approved by DOE in September of 2011. If the sub-grantee chooses not to follow the priority list or the home they are working on is above or below the acceptable range + or - 50 percent of the square footage of the assumption, a new computer energy model will be run to generate a new priority list for that home. See "A computer audit is required if:" section for more details on when it will be necessary for a computer audit to be performed.

If working in an area or municipality where code exceeds items on the priority list, code should be followed.

### V.5.3 Final Inspection

It is important that the most accurate information be report on completed weatherized units.. This information will not only show that performance goals are being met, but also portray the WAP in the best light to Congress and other interested parties. Meeting performance goals helps in attracting higher appropriations in the future and also assisting states and sub-grantees with their leveraging efforts. A weatherized unit is a dwelling unit on which an approved energy audit or priority list has been applied and weatherization work has been completed. The use of DOE funds on a unit may include, but are not limited to, auditing, testing, measure installation, inspection, the purchase of equipment or vehicles, training, or administration. Therefore, a dwelling unit meeting both the definition of a DOE weatherized unit and has DOE funds used directly on it may be included in the production numbers reported. In order to make sure these requirements are met, a final inspection must be done to all completed homes in order for them to be fully completed.

Note: Weatherization crews, including supervisory persons that also work to install weatherization measures on a unit, should not perform the final inspection of the unit. DOE recommends the final inspection be performed by a person(s) not directly associated with actual work that was performed on the unit. In the event that this provision cannot be met due to staffing levels or budget constraints, OEP must be notified annually in writing why this provision cannot be met and the sub-grantee will be subjected to a higher percentage of site inspections by grantee.

A final inspection by sub-grantee:

- Shall be performed after all work is completed and final test out has been performed
- Shall be performed on all jobs before it can be counted as a completed job
- Must be completed by designated inspector who did not conduct the initial energy audit and was not directly involved with the weatherization measures/work completed on the job. Special consideration will be taken for sub-grantees with limited staff or long distance travel. Sub-grantees who would like to request a waiver of this requirement must submit a letter in writing to the OEP Weatherization Manager stating the circumstances why this requirement cannot be achieved and how they plan to address conducting the final inspection. This letter must be submitted annually at the time of contract signing. Sub-grantees that request the waiver and are approved, will be subject to a higher field audit percentage by the state
- Shall verify that all cost effective opportunities were completed, budget permitting
- Shall verify all invoices for the job are invoiced properly, nothing billed incorrect, or billed for services/work not performed
- Shall verify that the house characteristics reported are correct
- Shall include a review of the diagnostic result, both pressure and combustion safety, to verify that all applicable tests were completed
- Shall complete diagnostics on a minimum of ten percent of completed homes to compare with reported results
- Shall include a review of all measures listed on the Work Performed Report to verify installation has been completed in a safe and effective manner following program requirements
- Shall also include an analysis of the energy audit to ensure that it was completed in an efficient manner, that all areas of the audit have been addressed, and that the scope of work reflects a comprehensive energy audit

Once a sub-grantee has completed their final inspections, the job must be turned over to a qualified Quality Control Inspector (QCI) for a Quality Control Inspection. A qualified QCI will be someone who has met the qualifications to sit for the QCI exam and passed it. After the QCI has reviewed and passed the job, it may be reported as a completed home to OEP and DOE.

A Quality Control Inspection:

- Shall be completed after all work by the sub-grantee is completed and their final inspection has been completed
- Shall be performed on all jobs before it can be counted as a completed job
- Shall include an analysis of the energy audit to ensure that it was completed in an efficient manner, that all areas of the audit have been

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addressed, and the scope of work reflects a comprehensive energy audit

- Shall verify reported diagnostic numbers are correct
- Shall verify that all cost effective opportunities were completed, budget permitting
- Shall verify all invoices for the job are invoiced properly, nothing billed incorrectly, or billed for services/work not performed
- Shall include a review of the diagnostic result, both pressure and combustion safety, to verify that all applicable tests were completed
- Shall include a review of all measures listed on the Work Performed Report to verify installation has been completed in a safe and effective manner, following program requirements
- Shall fill out the OEP standardized Quality Control inspection form, sign it and provide a copy for the file, stating the unit is complete and ready to be reported to OEP

There are two types of QCI

1. The independent QCI inspector is an inspector that had no involvement in the job except for the Quality Control Inspections. The individual did not perform the initial audit or any work on the home. In this scenario the grantee must monitor a minimum of 5%
2. The Independent Auditor/QCI is a person that performs the initial audit and develops the scope of work but is not involved with any of the work performed on the home. This same person performs the Quality Control Inspection. If this method is chosen by a sub-grantee, they will be subjected to more oversight by the state; the state will monitor 15 percent of the jobs.

After the above process is completed and there are no follow-up concerns, only then can the job be marked as completed and submitted to OEP and DOE.

#### **Lack of Compliance with QCI**

If a sub-grantee is found to be in violation of the requirements of the Quality Control Inspection process, they will be formally written up. The write-up will:

1. List where the sub-grantee is failing at following the process.
2. List where the sub-grantee can find the guidance needed to help address the concern, if other than at the state level.
3. Request the sub-grantee create a plan of action in writing on how they will fix the concerns and forward the plan to OEP within 30 days of receiving the non-compliance letter.
4. Require that the corrective plan is followed and that the process is improved.
5. Require OEP to:
  - a. Reject jobs and hold funding to sub-grantees if there were jobs that did not receive a quality controlled inspection by the sub-grantee.
  - b. Place the sub-grantee on a 90 day probation period upon discovery of non-compliance.
  - c. Increase the frequency and percentage of field audits of the sub-grantee until such time that the state feels that the problems/concerns have been addressed to their satisfaction.
  - d. Mandate the sub-grantee create a plan of action to fix concerns.

If OEP does not receive the plan of action within the required time frame or the process is not fixed within the corrective plans time frame, the sub-grantee will no longer be allowed to facilitate the weatherization program for their service area.

However, if the sub-grantee approaches the state for help, the state will provide as much assistance as possible to the sub-grantee so they may address the state's concerns. This request for assistance must be made by the sub-grantee in a reasonable time frame during the allowable follow-up period. (Refer to #3, above)

#### **V.6 Weatherization Analysis of Effectiveness**

OEP has a process to track energy savings by using utility usage analysis which compares completed measure cost in a home to annual savings of utility usage. This is done by comparing the energy usage of randomly picked weatherized home utility usage at least 18 months prior and after weatherization work was completed. The before usage and after usage is subtracted to obtain the actual energy saving for the home. The savings is combined with the measure cost completed on the home, first by the total spent on the home and second by just energy related measures including



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audits. These two calculations allow OEP to achieve the two Saving-to-Investment Ratio (SIR) numbers below, one for total SIR including health and safety and the other for just energy related SIR. All funding sources used on the homes are calculated in the SIRs.

SIR calculations below were based on an analysis of 225 homes utilizing APS, TEP, Unisource Gas and Electric and Southwest Gas utility data. This analysis is ongoing, and new data will be updated to these values on a quarterly basis.

#### Assumptions

Present value is based on 17.5 years measured life, discount rate of 3% and utility cost escalation rate of 3%.

#### Results Summary

The combined SIR of all jobs reviewed to date for funds (LIHEAP, DOE, utility funding) spent on diagnostics, energy measures and health and safety measures is 1.04 SIR. The combined SIR of all jobs reviewed to date for funds spent on energy measures and diagnostics is 1.26. Please note that sub-grantees often run parallel programs using other funds such as CDBG to cover those items that cause deferrals.

The average energy savings per home reviewed was 2265 kWh of electricity and 42 therms of natural gas (gas therms average includes all electric homes).

OEP will continue to track utility histories of completed jobs, the tracking of post-weatherization energy savings will give positive feedback to weatherization staff, highlighting measures or processes that provide high returns. Local operational changes can be based on this information to improve cost-effectiveness.

OEP will develop a policy on how to rate sub-grantees by the following: their performance; ability to follow DOE requirements; if concerns are found, how fast they are addressed; and their billing practices. This performance review will be adopted and used on an annual basis to determine the sub-grantees effectiveness in WAP. Once the policy is developed it will be distributed to the agencies to set expectations and goals required for WAP.

## V.7 Health and Safety

Allowable energy related health and safety actions are those actions necessary to maintain the physical well-being of both the occupants and/or weatherization workers where:

- Costs are reasonable as determined by DOE in accordance with this approved Master Plan;
- The actions must be taken to effectively perform weatherization; or
- The actions are necessary as a result of weatherization work.

Each sub-grantee will have 15% of their program operations set aside for energy related health and safety repairs. Each sub-grantee will be responsible for the management of their health and safety budget and will be required to bill health and safety repairs as a separate budget line item. **Sub-grantees will also be required to obtain written approval from OEP for all health and safety repairs exceeding \$2000.** Sub-grantees are also reminded that any health and safety expenses in excess of 15% of sub-grantee program operations budget will result in disallowed cost.

### Home Assessment & Client Evaluation

The weatherizing sub-grantee must determine presence of at-risk occupants before proceeding with weatherization services. The Client Health & Safety Evaluation form must be reviewed and signed by the client and evaluator, once at the intake process and again at the initial audit before weatherization is started.

Crew and client H&S issues are viewed as closely linked in the areas of site conditions and work procedures. Working from this concept, which assumes that any hazard associated with a work site, whether it is a work practice, an existing condition, client behavior, and so forth, has the potential of harming both crew and client, a holistic approach towards H&S is taken throughout the entire process of weatherizing a home, with special emphasis given to the initial inspection.

The initial audit, by a qualified Auditor/ Inspector, should include sensory inspections and diagnostic testing as listed in the WAP guidelines to verify the existing conditions of the home and any Health & Safety issues that could arise or halt production on said home. Details on existing conditions that could hinder Weatherization are listed below.

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All of this is contingent on having well trained inspectors/ auditors. H&S issues are revealed before any work is ever done. This goes a long way towards preventing any harm befalling either crew or client.

## Occupant Pre-existing or Potential Health Conditions

A feature of any inspection includes client education, whereby the occupant's health problems are addressed. Once a clear understanding has been reached between the program inspector and the occupant, work practices will be deployed so as not to aggravate any preexisting condition. In some rare instances, a deferral may be the only solution.

When a person's health may be at risk and/or the work activities could constitute a health & safety hazard, the occupant at risk will be required to take appropriate action based on severity of risk. Temporary relocation of at-risk occupants may be allowed on a case by case basis. Failure or the inability to take appropriate actions must result in deferral.

Occupants will be required to reveal known or suspected health concerns as part of initial application for weatherization. The occupants of the dwelling will be screened again during the audit. The client must be provided with information of known risks. It will also require that worker contact information (in the form of agency weatherization office staff phone numbers) be given to the client so client can inform of any issues

## Health & Safety Issues

As potential hazards are identified by the intake specialist and Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, they are analyzed in terms of their severity and how they will be dealt with up to and including deferral. Wherever possible, measures should be considered through the cost justification method of an SIR>1 as an Energy Conservation Measure (ECM) first, before using funds from the H&S allocation. Clients must always be informed of any Health or Safety risk discovered during the evaluation process in writing and written confirmation of receipt of that information by the client must be obtained and kept in the client file. A listing of Health and Safety issues are compiled, any of which that can't be corrected can result in a deferral on any given project. They are as follows:

## Air Conditioning and Heating Safety

"Red tagged", inoperable or nonexistent HVAC system replacement, repair, or installation is allowed where climate conditions warrant, unless prevented by other guidance herein. Arizona climate involves a defined heating and cooling season with a Heating Degree Day (HDD) measurement range from 1180 to over 7200. The Cooling Degree Day (CDD) measurements in Arizona range from 573 to more than 5100. Arizona has a vast difference across the state due to the four recognized climate zones and a the vast difference in elevation changes from a few hundred feet above sea level to more than 7000 feet above sea level.

Research indicates of all people who die of heat stroke, about 80 percent are age 50 or older. Deaths attributed to lung disease, diabetes and hypertension increase more than 50 percent during heat waves. Heat stroke occurs 12 to 13 times more frequently in people age 65 and older than in younger persons. It is also an accepted medical fact that infants and children up to four years of age are very sensitive to the effects of high temperatures and rely on others to regulate their environment.

Air conditioning is the number one protective factor against heat-related illness and death effecting people with health issues. Therefore air conditioning system replacement, repair or installation is allowed to be categorized as health and safety in homes with occupants under four years old, over 65 years old and where there are at-risk occupants. Air conditioning system replacement, repair or installation must be attempted through cost justification as an ECM first before using H&S funding. Where this measure can be justified by the approved REM or EA-Quip audit, replacement, repair or installation is not to be included in health and safety.

**Reminder- Air conditioning units cannot be installed on rental properties, as it is the requirement of the Landlord pursuant to the Arizona Landlord Tenant Act.**

**All replacement of HVAC equipment shall first be modeled in REM Design to attempt a SIR of 1 or greater prior to being installed as an H&S measure.**

Houses with occupants between the ages of 4-64 requesting the need for air conditioning based on their health being at risk must provide a letter from a doctor defining the condition requiring an air conditioned environment and the maximum allowable air temperature relevant to that person's individual condition.

Repair of all combustible fuel line leaks from the meter or tank to the heating system or appliance are allowable H&S measures. Materials must meet federal, state, and local code. Only repairs of gas cooking appliances in order to eliminate gas leaks and reduce unsafe levels of carbon monoxide in living area are allowed. Repair materials must meet federal, state and local code. Installation of protective materials on combustible surfaces adjacent to energy systems to meet NFPA clearance codes is allowable. Materials and installation must meet NFPA specifications. Materials must meet federal, state and local code.

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## Heating Systems

Heating systems are repaired or replaced, under H&S, when not operational or unsafe. This measure is taken in order to eliminate unsafe levels of carbon monoxide in the living area and to ensure adequate heating. Justification documentation in the form of the appropriate heat system checklist (per energy source) which includes all required diagnostic recordings for the individual unit, and photos demonstrating the specific issue(s) with the system must be in the client file. Replacement of operational units, where diagnostic readings are attainable, must be attempted to be cost justified as a ECM using regular weatherization funds with an SIR>1 before using H&S funds. A unit with a cracked heat exchanger where diagnostic readings are attainable must be attempted to be replaced through cost justification as an ECM first before using H&S funding. Replacement of non-operational units can only be from H&S funding.

## Air Conditioning & Cooling Systems

In a case where an AC system must be replaced and it cannot be justified as an ECM, replacement is an allowable expense under H&S and will always require an approved waiver from OEP. Evaporative Cooling will always be considered an H&S measure but do not require a waiver unless the \$2000 threshold is exceeded.

### Package Unit Systems

When a package unit is encountered and only one component of that system is inoperable, you must first attempt to service the unit using H&S funds. If servicing the unit does not work and replacement of the inoperable component is determined to be less economical than the replacement of the entire unit, H&S funds may be used upon receiving written approval from OEP.

The weatherizing sub-grantee must determine presence of at-risk occupants while also ensuring systems are present, operable and performing. Sub-grantees must discuss and provide clients with information on the appropriate use and maintenance of units, with explanation, from the sub-grantee.

## Appliances and Water Heaters

Replacement of water heaters under H&S is allowed on a case by case basis under the following conditions outlined:

- Local agencies may replace a water heater if the cost of repair exceeds the cost of replacement or if the broken water heater is more than 10 years old.
- Pictures of the old water heater are to be on file at sub-grantee's office.

Information and explanation on appropriate use and maintenance are to be provided to client after installation. Disposal of old appliances and water heaters must be handled by sub-grantee or their contractor.

**Replacement and installation of appliances other than water heaters, such as stoves or washing machines, are not allowable H&S costs under DOE rules.**

## Asbestos

Asbestos anywhere on the interior of the dwelling that would need to be addressed either directly or incidentally during the weatherization process is not an allowable H&S cost. Testing by an AHERA professional for Asbestos is an allowable Health & Safety cost however Abatement of Asbestos is not. Policies have been in effect for asbestos presence and related work practices for many years. The approach is not to disturb, cut or drill said material and deter those measures that might do so. In instances where measures can be installed without disturbing asbestos surfaces or materials, that is the best approach. In instances where a local authority such as Code Enforcement imposes specific guidelines or requirements, service provider program staffs are to make themselves aware of those restrictions and comply with them.

If it is determined, by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, that weatherization work cannot be performed without creating a hazard the project is to be deferred. The client is to be informed in writing of the potential hazard and the agency must not return to weatherize until an AHERA certified professional issues a clearance statement. A copy of this statement/report must be kept in the client file.

Prior to drilling or cutting an exterior wall the subsurface must be inspected for asbestos.

When vermiculite is present, unless testing determines otherwise, the unit is to be deferred. Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization. Encapsulation by an appropriately trained professional is allowed. However asbestos encapsulation and testing cost are not reimbursable by the AZ WAP. Removal is not allowed.

With regard to pipes, furnaces and other small covered surfaces, assume asbestos is present in the covering materials. Encapsulation is allowed by an AHERA

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asbestos control professional and should be conducted prior to blower door testing.

Clients must be informed that suspected asbestos is present and how precautions will be taken. Clients will be instructed not to disturb suspected asbestos containing material. Clients must be provided information and explanation on asbestos safety information and steps to correct deferral conditions (where applicable). The clients are required to sign a form, provided by the weatherizing agency, indicating they have been informed (where applicable).

### **Biologicals and Unsanitary Conditions – odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.**

A sensory inspection is required. Clients must be informed of observed conditions. Clients must be provided information and explanation on how to maintain a sanitary home and steps to correct deferral conditions (where applicable).

Remediation of conditions that may lead to or promote biological concerns and unsanitary viruses is not an allowable cost. Addressing bacteria and viruses is not allowed. Cleaning or repairing biological and unsanitary conditions to perform weatherization is not allowed. Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers. Also see Mold and Moisture bullet below.

### **Building Structure and Roofing**

Site conditions identified and documented by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, that poses a safety hazard to its employees and subcontractors and cannot be corrected within the scope of the program. Building structure & roofing should be evaluated visually as to not disturb any existing conditions.

Building Structure – Structural problems with candidate dwellings can often lead to deferral because their scope is beyond the means of the program to treat. Beyond simple incidental repairs, such as roof patching, there is no feasible means to address severe structural defects.

During the pre-inspection or initial inspection of the dwelling, the evaluator must have access to all aspects of the structure in order to adequately and appropriately gather data for the REM energy audit if not using Priority List or to conduct the weatherization work itself. Items such as clothing, dogs, trash or other impediments restricting access to any portion or portions of the dwelling that blocks necessary access may constitute a deferral.

Building rehabilitation is beyond the scope of the WAP. H&S funds should not be used when the repair is a component of an ECM. In that case, the repair should be cost justified as an incidental repair. Clients must be notified of structurally comprised areas (where applicable).

### **Code Compliance**

Correction of preexisting code compliance issues is not an allowable cost other than where they are triggered by performing weatherization measures. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where “red tagged” health and safety conditions exist that cannot be corrected under this guidance should be deferred.

Per WPN11-6a if a permit is pulled to replace a HVAC system, water heater or other appliance requiring a permit and it is require by the municipality to upgrade all smoke alarms in the home to hardwire with battery backup it would be allowed

Clients must be notified of observed code compliance issues (where applicable). H&S funds should not be used when the repair is a component of an ECM, such as fixing a light fixture in order to install a CFL bulb. In this case the cost should be cost justified as an ECM with the associated incidental repair.

### **Combustion Gases**

Proper venting to the outside for combustion appliances, including gas dryers is required. Correction of venting is allowed when testing or inspection indicates a problem. Combustion safety testing is required when combustion appliances are present.

Correction of venting issues shall be completed and should be done as an incidental repair when it is a component of an ECM. Proper venting to the outside for combustion appliances, including gas dryers is required. Combustion safety testing is required when combustion appliances are present. Inspections, by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, must include:

- Inspections of venting of combustion appliance and confirmation of adequate clearances to combustibles.
- Testing natural draft appliances for draft and spillage under worse case conditions before and after air sealing.
- Inspection of cooking burners for operability and flame quality. Replacement of Cook stoves is not allowed. Repair is an allowable H&S cost.
- Testing by approved WAP procedures of ambient air in combustion appliance zones & undiluted flue on applicable appliances.

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Clients must be provided information and explanation of combustion safety and hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.

**Drainage – gutters, down spouts, extensions, flashing, sump pumps, landscapes, etc.**

Drainage repairs are allowed with H&S funds only as they relate to code compliance. A repair is allowed as incidental repair when it is a component of an efficiency measure, but must be cost justified with the ECM(s).

Major drainage issues are beyond the scope of the Weatherization Assistance Program. Homes with conditions that may create a serious health concern that require more than incidental repair should be deferred. See Mold and Moisture bullet below.

What are major drainage issues?

- Where the need for excavating equipment is brought
- Installing gutters on more than half the home
- An area more than 40 square feet where dirt is required to be moved

Clients must be provided information and explanation of the importance of cleaning and maintaining drainage systems, as well as the benefits of landscape design (where applicable).

## **Electrical, other than Knob-and Tube Wiring**

Minor electrical repairs, under \$300, are allowed where health and safety of the occupants is at risk. Upgrades and repairs are allowed when necessary to perform specific weatherization measures such as relocating an electrical outlet to allow for a dryer to be relocated for proper ventilation or proper connection of an existing water heater. Also may include installing a GFCI in a bathroom outlets, replace two wall outlets that are broken or replacement of bad breakers.

Clients must be provided information and explanation on the hazards of overloading circuits, basic electrical safety/risks and over current protection (where applicable). H&S funds should not be used when the repair is a component of an ECM such as a service upgrade to handle increased load of a new HVAC system.

## **Electrical, Knob-and Tube Wiring**

**If Knob and Tube wiring in a home in Arizona cannot be replaced under an ECM like insulation, that home will be a deferral until the wiring can be upgraded to current wiring codes by homeowner or other program.** Sub-grantees are encouraged to seek all available programs to assist low-income households.

Sub-grantees are required discuss and provide information and explanation to the client on the hazards of overloading circuits, basic electrical safety/risks and over current protection (where applicable).

## **Fire Hazards**

Current inspection criteria (by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above) take into account fire hazards associated with combustion appliances including clearances and venting systems. Through fuel specific checklists, inspectors identify such hazards and make repairs accordingly with respect to budgetary and program limitations. Adherence to appropriate NFPA codes when repairing or replacing equipment is a requirement, also it minimizes the potential for fire hazards.

Correction of fire hazards is allowed when necessary to safely perform weatherization. Home evaluations include checking for fire hazards during the audit. Clients must be informed of observed hazards even if they will not be treated during weatherization.

## **Formaldehyde, Volatile Organic Compounds (VOCs) and other Air Pollutants**

Formaldehyde and Volatile Organic Compounds (VOCs) – Formaldehyde, tobacco smoke, thinners, solvents, cleaners, and any other substances capable of negatively impacting indoor air quality are identified through the On-site inspection process. Basic strategies such as proper storage and ventilation are used to eliminate problems. Air sealing thresholds are maintained so that the presence of these pollutants are not concentrated and allowed to reach toxic amounts. However, this is primarily an occupant responsibility. In some cases, deferral may be an option.

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Removal of pollutants is allowed and is required if they pose a risk to workers. If it is determined, by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, that pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred. Removal of pollutants that is not necessary to perform weatherization (e.g. cleaning old paint cans and oil out of the garages) is not allowed.

Clients must be informed of observed conditions and associated risks. Client must be given written information and explanation on safety and proper disposal of household pollutants (where applicable).

## **Injury Prevention of Occupants and Weatherization Workers – Measures such as repairing stairs and replacing handrails**

Workers must take all reasonable precautions against performing work on homes that will subject workers or occupants to health and safety risks. Minor repairs and installation may be conducted only when necessary to effectively weatherize the home; otherwise these measures are not allowed.

The Initial Auditors/ Inspectors, as well as workers where jobs are in progress, are to observe if dangers are present that would prevent weatherization. Clients must be informed by auditors and/or workers of observed hazards and associated risks (where applicable)

## **Lead Based Paint**

The cost of lead paint abatement is prohibited. However, the cost to test building materials for the presence of lead paint and the cost of precautions needed to prevent causing a lead paint contamination problem while installing weatherization materials is allowable. Lead-based paint (LBP) was used on the majority of houses built before 1978. It is probable that LBP is present on houses weatherized by the Arizona WAP that were built before 1978. If lead-based paint may be disturbed (cut, scraped, sawn, drilled, etc.) during the weatherization work, that work shall be done in a "lead-safe" manner. Arizona will follow the approach that has been defined by the Environmental Protection Agency under their EPA Lead Renovation, Repair, and Painting Rule.

Read about lead-hazard information for renovation, repair and painting activities in the EPA lead hazard information pamphlet [Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools](#) (PDF) (11 pp, 1.1MB) | [en español](#) (PDF) (11 pp, 2.4MB)

All providers are required to provide a copy of "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools" prior to the start of work to an adult of all homes to be weatherized. The inspector will also conduct a client education segment as part of the initial inspection to assure that the occupants are fully aware of the hazards posed by Lead Based Paint exposure. This procedure is documented by a written acknowledgement that the adult resident has received the brochure and that the information was not only distributed, but also explained, or certify in writing that a brochure had been delivered to an adult resident and the provider has been unsuccessful in obtaining a written acknowledgement, as directed in the publication. Confirmation of receipt of this brochure by the client will be maintained in the client file.

State policy mandates all workers on site on any Weatherization project, whether they be a crew based employee of one of the subcontractors or a private sector contractor, must complete an eight (8) hour Lead Safe Worker Practices Workshop. New staff will be required to attend the training within 180 days of their start of employment in the weatherization program. The aim of this course is to inform the worker about Lead hazards and the proper ways to deal with them, and in doing so, to work in such a way as to not expose client families (and their own families) to these hazards. All crews and contractors are required to carry HEPA vacuum machines, respirators, disposable bio suits, and all other items associated with safe Lead Work Practices.

- Wear a tight fitting respirator and disposable coveralls.
- Seal work areas within a home with tape and plastic. Cover furniture, carpet, and other surfaces with plastic drop cloths or tarps.
- Spray water on disturbed areas to minimize dust.
- Clean-up work area each day. Sweep carefully and wet mop as needed. Use a HEPA vacuum cleaner to collect dust and paint chips.
- Keep children away from work area at all times.

While this represents only a summary of the overall Lead Safe Practices and training, it illustrates AZ WX's awareness of the issue and how it is integral to any weatherization project.

Lead Safe Weatherization work practices occur only due to health and safety concerns. It cannot be considered part of an efficiency measure and shall always be calculated and charged as a health and safety cost.

OEP's monitoring staff will have oversight responsibility in this area. While Lead Safe Work Practices have long been built into the program, the monitors will focus more directly on this area as they conduct their monitoring visits. Sub-grantee staff will be required to show that all Lead Based Paint protocols:

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information sharing, lead safe work practices, proper equipment, and so forth are up to date and in compliance to all regulations whatever they turn out to be. While OEP monitors visits completed and in progress homes and finds the sub-grantee performing weatherization services without working lead safe practices on a home built prior to 1978 the OEP monitor will report this as an action requiring attention in the monitoring report. The sub-grantees, that are not in compliance, will be required to attend the WAP Boot camp which includes LSW course offered by the SWBSTC Sub-grantees that fail to comply and correct there practices for lead safe weatherization, once identified, will face the most serious sanctions that can be leveled: reduced allocation to start with, loss of contract if necessary. Special attention will be aimed at those programs failing to meet requirements in the area of Lead Safe Work Practices since it poses such tangible consequences for the households that are served.

Sub-grantees must follow EPA's lead; Renovation, Repair and Painting (RRP). In addition to RRP, Weatherization requires all weatherization crews working in pre-1978 housing to be trained in Lead Safe Weatherization (LSW). Arizona's Deferral Policy will be used in instances where the homeowner or landlord has notified the sub-grantee of lead paint issues existing or where lead poisoning has occurred to a member of the household or when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards. . This policy requires referral to other programs, if one is known to exist in the area, designed to address the concerns.

Arizona's current status is as follows: all sub grantees have applied for and received Lead Renovator Firm status. All auditors (inspectors) have acquired Lead Renovator (RRP) certification as well as select crew leaders. Additionally, private contractors (excluding HVAC and Plumbers) have also applied for and received Lead Renovator Firm status. This is a requirement for contracting with the program. Private contractors have also met the requirement of having adequate RRP certified employees among their ranks. In summary, Arizona has met the EPA requirements as they now stand by April 2010 deadline. As new contractors apply to work on WX projects the EPA requirements are explained during the application process. No private contractors will be awarded work on any pre-1978 dwellings that don't meet the EPA rules.

Private contractors will be required to furnish proof of RRP and Lead Renovator Firm status as a condition of working for the WX program. The monitoring staff will routinely check that documentation is on file at each agency, verifying compliance to EPA rules.

All weatherization crews working on pre-1978 homes must receive the 8 hour LSW training and a certified renovator must be assigned to the project and be readily available.

State Monitor/Trainers must be Certified Renovators and receive the 8 hour LSW training.

The head of household of every home to be weatherized receives the informational pamphlet: "Renovating Right". The inspector also conducts a client education segment as part of the initial inspection to assure that the occupants are fully aware of the hazards posed by Lead Based Paint exposure.

The RRP requirements of client education apply. The agencies must give the client a copy of the EPA publication: July 2011 Edition of: *The Lead-Safe Certified Guide to Renovate Right Pamphlet* and have the client sign the Sample Pre-Renovation Form located in the back of the Pamphlet to certify the client has been given the pamphlet.

That signed form must be kept in the client's file to show proof the client has received educational material about the dangers of lead paint.

The certified renovator must be physically present at the work site while signs are being posted, containment is being established, and the work area is being cleaned after the renovation to ensure that these tasks are performed correctly. Although the certified renovator is not required to be on-site at all times, while the renovation project is ongoing, a certified renovator must nonetheless regularly direct the work being performed by other workers to ensure that the work practices are being followed. When a certified renovator is not physically present at the work site, the workers must be able to contact the renovator immediately by telephone or other mechanism. In addition, the certified renovator must perform the post-renovation cleaning verification.

## Mold and Moisture

The Weatherization Assistance Program does not encompass mold remediation. DOE funds are not to be used to test, abate, remediate, purchase insurance, or alleviate existing mold conditions identified during the assessment, the work performance period or the quality control inspection. Where multiple funding sources are used, the performance of any of the aforementioned activities must be expensed to a non-DOE funding source. Most typically, weatherization services may need to be delayed. All local agencies must include some form of notification or disclaimer to the client upon the discovery of a mold condition and if corrected, what was specifically done to the home that is expected to alleviate the condition and/or that the work performed should not promote new mold growth.

Where existing mold could pose a health risk to both the inhabitants and the weatherization crew, DOE funds may be used to correct energy-related conditions and/or to assure the immediate health of workers and clients. No more than 16 square feet of water damage repairs can be addressed by weatherization workers if it is in connection with the correction of moisture and mold creating conditions that are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures. Weatherization of a home, and air-sealing in particular, could potentially increase the risk of moisture and mold in a home, thereby causing structural damage and/or a health risk to the inhabitants, extreme caution should take place when weatherization work is performed not to increase mold or moisture issues. Where severe Mold and Moisture issues cannot be addressed, deferral is required.

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**Arizona** – The following protocols have been adopted to ensure that these risks are minimized during weatherization.

**A) Moisture Assessment**

All homes should be checked for previous or existing moisture problems. Mold in homes arises from conditions of excess moisture. During initial inspection, field coordinators are to assess the homes with special attention to the following signs: Evidence of condensation on windows and walls indicated by stains or mold; standing water, water stains, etc.

Also, check to see if there are leaking supply or waste pipes; attic roof sheathing shows signs of mold or mildew.

Identification of existing or potential moisture problems shall be documented in the client file.

If existing moisture problems are found, no air sealing should be done unless the source of the moisture can be substantially reduced or effective mechanical ventilation can be added to cost effectively remove the moisture. In some cases, air sealing must be done in order to reduce the source of the moisture (i.e. sealing off crawlspaces from the house, or sealing attic leakage to eliminate condensation on the roof deck). Because air tightening may cause an increase in relative humidity, client education should include information about moisture problems and possible solutions. In the course of weatherization, any low-cost measures that help reduce the humidity levels in the house should be installed.

**Examples of these activities are:**

- Venting dryers
- Venting existing bath exhaust fans
- Venting existing kitchen exhaust fans

**B) Repair or Elimination of Moisture Problems**

Repair of moisture problems that might result in health problems for the client, damage the structure over the short- or long-term, or diminish the effectiveness of the weatherization measures must be done before the weatherization job is completed. Moisture problems can be reduced or eliminated by controlling the source of the moisture.

**This can involve:**

- Venting dryers to the outside of the building;
- Providing positive drainage away from foundation, if only a small area needs to be addressed, regarding the foundation perimeter is not allowed;
- Repairing small roof leaks and flashing issues
- Educating the client about the sources of moisture that they are able to control.
- Moisture problems can be reduced or eliminated by ventilating areas where excessive moisture is produced, such as bathrooms and kitchens. This should include installation of a high quality exhaust fan in the subject area and informing the client of the related moisture issues and the proper operation and use of the fan.

Major moisture problems that cannot be corrected within the scope of the program such as, but not limited to:

- An enclosed crawlspace or basement that has standing water for 24 hours due to inadequate ground or surface water drainage.
- Any building with no overhangs and no gutters, exhibiting signs of major moisture problems such as blistering paint and extensive mold/mildew on the inside of the house.
- Needing to re-grade foundation perimeter to create opposite water flow away from the foundation

The clients must be provided with a disclaimer on mold and moisture awareness

The EPA publication, "A Brief Guide to Mold, Moisture, and Your Home", is available here in [HTML](#) and PDF formats in English ([PDF](#), 20 pp., 257 K) and Spanish ([PDF](#), 20 pp., 796 K). This Guide provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth.

**Occupational Safety and Health Administration (OSHA) and Crew Safety**

Workers must follow OSHA standards and OSHA Hazard Communication Standard (HCS) Safety Data Sheets (SDS) and take precautions to ensure the health and safety of themselves and other workers. SDS must be posted wherever workers may be exposed to hazardous materials.

SDS information is monitored during OEP compliance monitoring. Field monitoring performs unit file review for evidence of safe work practices. Field



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monitoring of in progress units will perform assessments to determine if crews are utilizing safe work practices.

OSHA 10 hour training for all workers, including contractors, assessors, and inspectors, is required. OSHA 30 hour training is required for all crew leaders and OEP Monitor/Trainers by June 30, 2012. All new employees must obtain OSHA 10 or 30 depending on their position held within 180 days of hire. This training can be obtained in various ways. The following are suggested resources.

Classroom Training

**Construction 10 hour and Construction 30**

1. Southwest Building Science Technical Center

Online Training

OSHA has accepted the below sites for online outreach training. We suggest that you sample them before choosing.

**Construction 10 hour**

1. Advance Online
2. Click Safety (also Roadway, Cal-OSHA, and Spanish)
3. Summit Training Source (also Spanish version)
4. Pure Safety (also Spanish version)
5. Career Safe - (Youth and Corporate versions)
6. Redvector
7. 360Training
8. University of South Florida
9. Coastal Training Technologies
10. Turner Construction

**Construction 30 hour**

1. Turner Construction (also Spanish version)
2. Click Safety
3. 360Training
4. Summit Training Source
5. University of South Florida
6. Pure Safety
7. Advance Online

**Information on obtaining OSHA outreach classes in construction**

To find in-person training conducted by an authorized OSHA Outreach Trainer:

- a. See www.OutreachTrainers.org to find outreach trainers and/or their schedules

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We can send you a list of active trainers in your state – e-mail us if you want this list. Use the lists to contact trainers for information on their training plans.

b. OSHA Education Center in your area may offer it - [www.osha.gov/dte/edcenters/map.html](http://www.osha.gov/dte/edcenters/map.html)

c. The OSHA Consultation office in your area may offer it, see

[www.osha.gov/dcsp/smallbusiness/consult\\_directory.html](http://www.osha.gov/dcsp/smallbusiness/consult_directory.html)

## Pests

If found, by the Initial Auditor/ Inspector in the *Home Assessment & Client Evaluation* as listed above, any pest infestation within the dwelling or in any area outside of the dwelling where service provider staff or subcontractors would have to work to perform weatherization measure is an allowable expense. Cost of pest control cannot exceed 300 dollars and/or 20 percent of the homes budget. If the cost is great than that amount the home will be a deferral until the problem can be handled by another program or the homeowner. (Pests include, but are not limited to: fleas, roaches, rodents, etc.).

Clients must be informed of observed condition and associated risks.

## Radon

Whenever site conditions permit, exposed dirt must be covered with a vapor barrier except for mobile homes without skirting or an exterior under surface that serves as a vapor barrier. In homes where radon may be present, precautions should be taken to reduce the likeliness of making radon issues worse. In extreme cases deferral may be an option.

In the State of Arizona Radon testing or remediation is not an allowable H&S measure. Clients must be provided with the EPA consumer's guide to radon.

## Refrigerant

Refrigerators are allowed to be replaced as an ECM only. All reclaimed refrigerant processes must follow the Clean Air Act 1990, section 608, as amended by 40 CFR82, 5/14/93. All EPA testing protocols must apply to any testing. Clients are to be advised not to disturb refrigerant. Anyone working with refrigerant, within or employed by the WAP, must have the appropriate training, either an EPA-approved section 608 type I or universal certification. For any appliance containing refrigerant, disposal must include refrigerant reclamation.

Non-certified technicians may not attach or disconnect hoses of gauges to measure pressure within the appliances, top-off or remove refrigerant from appliances or otherwise damage the integrity of the appliance.

## Smoke, Carbon Monoxide Alarms, and Fire Extinguishers

1. ALL HOMES must have a CO detector installed per ASHRAE 62.2-2013 standard
2. Weatherization agencies must install smoke alarms in dwelling units where these devices are nonexistent or non-functioning.
3. CO alarms must be, UL listed, installed in accordance with the manufacturer's recommendations and located in compliance with state and local building codes and must have the capability to accurately detect and display low levels of carbon monoxide to 10 ppm and comply with other program requirements.

Local agencies must provide the occupant(s) of the dwelling unit with verbal and written information regarding the following:

- a. Dangers of CO and smoke.
- b. How to operate and reset the CO and smoke alarms.
- c. How to read the CO alarm if there is a digital display.
- d. How to respond to CO levels above 10 ppm. (Symptoms of CO poisoning and how the occupant should address the issue should it arise)
  - The most common symptoms of CO poisoning are headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion.
  - If these symptoms are present shut off gas appliances, open windows and doors, get out of the home, seek medical help if needed and call a repair man.

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e. How to change the batteries of CO and smoke alarms.

4. Smoke alarms must be, installed in accordance with the manufacturer's recommendations, listed in accordance with UL 217, comply with NFPA 72 and other program requirements.

5. Where multiple smoke alarms are required interconnection is required. Actuation of any one smoke alarm shall activate all of the alarms in the individual unit. Hard wiring and interconnection is not required in existing areas provided:

1. The alteration or repair does not cause the removal of wall or ceiling finishes exposing the structure, and
2. No attic, crawl or basement is available which can provide access for hard wiring and interconnection without the removal of interior finishes.

6. On average no more than two smoke alarms will be installed in home unless a permit is pulled and code compliance for the municipality the home is located in states differently

7. Providing fire extinguishers is allowed only when solid fuel is present. Fire extinguishers must be installed, according to the manufactures recommendations, be type ABC, UL listed, = 10 lb and with a permanently affixed wall bracket to receive the extinguisher. The client must sign a written agreement to allow a fire extinguisher to be installed in the home within sight of the solid fuel burning heat system when standing at the unit. The agency must discuss and provide information on the use and upkeep of the extinguisher to the client.

### **Solid Fuel Heating (Wood Stoves, etc)**

The weatherization agency must inspect the stove, chimney and flue for proper operation. Combustion zone depressurization (CAZ) testing is required per weatherization standards.

Maintenance, repair, and replacement of primary indoor heating units is allowed where occupant health and safety is a concern. Maintenance and repair of secondary heating units is allowed. Replacement of secondary heating units is not allowed. This system must be operational and inspected before any other weatherization begins.

### **Stand Alone Electric Heaters**

Defined as, heaters that do not have a permanent connection to electric power or standalone heaters that have been connected to the power supply against code. Repair, replacement or installation is not allowed. Removal is recommended. Circuitry must be checked to ensure adequate power supply for existing space heaters by a licensed electrician.

Clients must be informed of the hazards associated with these types of heaters and the weatherization agency must collect a signed waiver from the client if removal is not allowed.

### **Space Heaters, Unvented Combustion**

Unvented combustion space heaters are not considered a primary heat source. Removal is required, except as secondary heat source and where the unit conforms to ANSI Z21.11.2. Units that do not meet ANSI Z21.11.2 must be removed prior to weatherization but may remain until a replacement heating system is in place. Testing for air-free carbon monoxide (CO) is allowable expense per weatherization standards. All units must have an ANSI Z21.11.2 label.

The client must be informed of the dangers of unvented space heaters – CO, Moisture, NO<sub>2</sub>, CO can be dangerous even if CO alarm does not sound. The replacement system must be inspected, operational and combustion tested per WAP standard test protocols before any other weatherization begins

### **Space Heaters, Vented Combustion**

These units will be treated as furnaces and test in the same manner as furnaces during an evaluation. The replacement system must be inspected, operational and combustion tested per WAP standard test protocols before any other weatherization begins.

### **Spray Polyurethane Foam (SPF)**

Use EPA recommendations (available online at [http://www.epa.gov/dfe/pubs/projects/spf/spray\\_polyurethane\\_foam.html](http://www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html)) when working within the conditioned space of when SPF fumes become evident within the conditioned space. When working outside the building envelope, isolate the area where foam will be applied, take precautions so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home. Testing will include checking for penetrations in the building envelope. Sensory inspection inside the home for fumes during foam application must also occur.

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The client must be informed of plans to use two-part foam and the precautions that may be necessary. Workers using foam products must receive training on the proper use of these various products and understand the specification for each application type. Documentation of installers viewing an installation video or online training and verification of reading and understanding product use information must be kept at the service provider agency. SDS are mandatory for any foam product used and a thorough understanding of the temperature sensitivity of the product in use is required.

## Ventilation

The State of Arizona will follow ASHRAE 62.2 2013 to the fullest extent possible.

Per ASHRAE standard 62.2-2013, all homes weatherized are required to have a CO detector/monitor installed. Monitor must meet WAP standards for level of CO readings

## Window and Door Replacement, Window Guards

Replacement, Repair, or installation is not an allowable H&S cost but may be allowed as an ECM if cost justified. If disturbing lead paint, follow LSW practices and the client must be informed on lead risks as indicated in this H&S plan when applicable. Replacement, repair or installation of doors, windows, or window guards is not an allowable H&S cost.

Window Glass is an allowable cost if it is an immediate danger to occupants if budget permits

## Deferrals

Deferrals, and/or "walkaways" are processed accordingly:

- a. The client shall be informed in writing as to why the dwelling cannot be weatherized. If there are conditions that the client must correct before service is provided, those conditions must also be stated in writing.
- b. The service provider is required to refer the client to any alternate program such as home rehab, if one is available in the area.
- c. The service provider shall clearly indicate in the client file why the dwelling was given "deferral" status.
- d. The service provider must document all referrals to other programs or services in the client file.
- e. The client will receive any information prescribed in the Health and Safety section that is appropriate.

## Client Education

This procedure is documented by using a signed receipt from the head of household which confirms that the information was not only distributed, but also explained. This receipt is kept in the client file. Forms have been developed to document all information discussed and given to the clients along with application and onsite interviews to verify preexisting at risk and health concerns.

## V.8 Program Management

### V.8.1 Overview and Organization

The Arizona DOE Weatherization Program is located within the Governor's Office of Energy Policy (OEP). In addition to DOE funds for weatherization, OEP manages Weatherization funds awarded by DES LIHEAP Weatherization Program and Utility Demand-Side-Management (DSM) funds. Other programs operated by the OEP are the State Energy Program (SEP) Formula Grant, SEP Special Project for Water and Waste Water Treatment Plants.

Organization charts showing how the office is structured are attached to the SF-424.

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**Mission**

The mission statement of the Weatherization Assistance Program is "To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, families with children, and for families with a high energy burden by improving the energy efficiency of their homes while ensuring their health and safety."

**V.8.2 Administrative Expenditure Limits**

Arizona will allocate 5% to sub-grantees and retain 5% out of the allowable total of 10% for administration. An additional five percent (5%) will be made available to sub-grantees receiving grants of less than \$350,000 of new DOE money.

**V.8.3 Monitoring Activities**

The state has a responsibility to perform monitoring and oversight of the work performed by the sub-grantee. DOE requires the state to perform a comprehensive monitoring of each sub-grantee at least annually. DOE requires, at a minimum, 5 percent inspection of completed jobs and also recommends performing inspection on in-progress homes. The state will visit a minimum of 5 percent of completed jobs. If the state during the random sampling of work and completed inspections discovers significant deficiencies (health and safety violations, poor quality installation of materials, major services missed, etc.), the state will elevate both the number of homes reviewed and the frequency of visitation until the deficiencies are no longer found. Once this happens the state will return back to its normal inspection rate.

Name	Type of Monitor	Credentials	Funded by
Michael Frary	Technical	EMIT(CEM), BPI Building Analyst, BPI Energy Auditor, Quality Control Inspector	35% T&TA
Field Monitor (TBD)	Technical	Unknown	15% T&TA
Evelyn Billings	Technical/Administrative	None	10% Administrative-10% T&TA
Linda Brumm	Administrative	None	15% Administrative
Trisha Ekenberg	Technical/Administrative	WAP Boot Camp	10% Administrative - 10% T&TA
Gloria Castro	Administrative	None	5% Administrative

We receive funds from DES LIHEAP and 5 of the state utilities to assist with the travel budget and funds for monitoring the 10 weatherization sub-grantees.

In addition, 100% of all jobs will be reviewed by desktop review via the Arizona WAP web-based database.

**A. Role**

The sub-grantees will be routinely monitored to:

- Determine program compliance and accountability
- Assist agencies in their program operations and compliance with DOE and state regulations
- Analyze program performance
- Analyze quality of work
- Identify problems, deficiencies, and areas that need improvement and advise on how to correct
- Analyze whether best possible program services are being delivered to low-income population
- Assess T&TA needs
- Improve program performance

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**B. On-Site Monitoring**

On-site monitoring of sub-grantees will be done to identify methods, deficiencies, and successes in program operations and to assess technical assistance needs to develop appropriate training courses. Inspection of completed dwelling units is done to monitor prioritization of weatherization measures, accuracy of energy audit, job costs, quality of workmanship and material standards so that the work completed is reflected in the job files. Inspection of warehouse and review of materials inventory are completed to insure adequate space and security at reasonable costs for the material inventory. Also, material inventory and condition of materials are verified. The Arizona WAP reviews sub-grantees monthly to determine if the sub-grantee is meeting its goals and expenditures in compliance with expenditure schedules. Program and fiscal monitoring will be used to determine the program and operational effectiveness of sub-grantees. Customer files, and sub-grantee financial systems, records and reports will also be routinely monitored to test the sub-grantee's ability to prudently deliver, support, and manage installations of allowable cost effective and energy efficient measures.

**B.1 On-Site Technical**

Sub-grantees will be notified of on-site technical monitoring visits at least two weeks prior to the visit. The monitoring event will consist of an agency office visit that may include a review of WAP files and staff interviews. The office visit will be followed by random client file reviews and completed home inspections. The OEP responsibilities related to the on-site technical monitoring event include the following:

- OEP will visit weatherization sub-grantees at least once a year for monitoring, according to a written monitoring plan and monitoring schedule included in the State Plan.
- Client files will be reviewed to include the following:
  - Eligibility Determination Present
  - Proof of Ownership or Signed Rental Agreement
  - Priority check list or copy of REM Design
  - Work Agreement/Notice to Proceed
  - Invoices/Purchase Orders For All Materials Installed
  - Lead-Paint Notification Documentation
  - Certified Renovator and Test Kit Documentation
  - Lead Safe Weatherization Documentation (including pictures)
  - Mold/Moisture and Hazard Assessment and Notification
  - State Historic Preservation Documentation (if applicable)
  - Diagnostic Testing Documentation (including Combustion Appliance Testing)
  - Heating System/DHW Bid Sheets, Heat Loss Calculations, Vendor's Bids, and any other Documentation necessary for Repairs and Replacements
  - Low-Cost/No-Cost Checklist
  - No Previous Weatherization Checklist
  - Refrigerator Protocol Page (if applicable)
  - Prior Approval Waiver (if applicable)
  - Sub-grantee Statement of Completion
  - Client File Checklist
  - Utility Release Form
- OEP will perform monitoring audits on a minimum of five (5%) percent of weatherization completions (See Final Inspection, Quality Control Inspection for more detail). OEP will inspect iprogress units as needed. The field monitoring will be an analysis of quality of field practices, including:
  - Audit procedures and compliance with audit protocols and work orders
  - Diagnostics
  - Overall effectiveness
  - Compliance with state field standards
  - Workmanship
  - Appearance

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- Thoroughness
- Health and safety issues
- Agency final inspection procedures
- Training needs
- OEP staff will select the weatherization completions to be inspected by reviewing by random selection of jobs submitted in the data base, unless particular jobs are deemed to require review. The sub-grantee will be notified of the homes selected for inspection prior to the visit to allow coordination with the home owners.
- OEP will use Standard Works Specification to evaluate the weatherization jobs until the states field guide is developed.
- OEP will recommend re-works, re-inspections, and T&TA visits in response to findings.
- OEP will investigate legitimate customer complaints, which may result in the sub-grantee being required to return to correct errors or omissions.
- OEP will note concerns about sub-grantee operations on the inspection report.
- OEP will disallow costs and/or designate the sub-grantee as high-risk and place the Sub-grantee on a Watch List in response to recurring major findings or persistent noncompliance with Arizona WAP policy.

The monitoring visit will be documented and a Field Monitoring Summary Report will be prepared and provided to the sub-grantee within 10 days following the completion of the monitoring event. The summary report will serve as the written results of the on-site technical visit. The reports will be based on:

- **Findings**—an issue that may be a violation of rules or standards and needs to be addressed.
- **Concerns**—an issue that may not be in violation of rules or standards but needs to be addressed.
- **Recommendations**—notation based on monitor's experience and expertise on how to improve certain aspects of the program.

## B.2 On-Site Fiscal

In accordance with the State Plan, on-site fiscal monitoring visits are required to evaluate sub-grantees' general administration and program management systems at least once a year

OEP will notify sub-grantees of scheduled on-site fiscal monitoring event at least two weeks prior to the visit. The visit typically requires a minimum of two days to complete and requires frequent interaction with the WAP Director and sub-grantee administrative staff.

Key issues identified during the fiscal monitoring:

- Procurement
- Invoicing techniques
- Accurate job costing
- Proper designation of expenses between Administration and Program Operations
- Property records and inventory control

Following the on-site fiscal monitoring visit, a Summary of Findings Report will be prepared and typically provided to the sub-grantee within 30 days following the completion of the monitoring event.

## C. Desk Top Monitoring

Every month, each agency will be monitored through the state data base system of all jobs submitted for that month. The goals of desk top monitoring are:

- Performance analysis of weatherization work in the home
- Review of weatherization expenditures
- Compliance issues
- Identify specific focus areas for an agency visit, including problematic jobs
- Can save time of actual sub-grantee visits by preparing and organizing information in advance

A report will be generated from the desk top review which will identify any compliance issues that may occur. Agencies will be sent a desk top 'draft' report if issues exist that need correction and will be given 15 days to comply with the necessary corrections. If the sub-grantee fails to comply in the 15-day time frame, funding may be withheld until compliance occurs. A final desk audit report will be sent to the agency after all issues have been addressed, or if no issues occurred during the desk audit.

## D. Tracking

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The OEP may, by giving reasonable written notice specifying the effective date, terminate this grant in whole or in part for cause, which shall include:

- Failure, for any reason, of the sub-grantee to fulfill in a timely and proper manner its obligation under this grant including compliance with the approved work program and attached conditions, and such statutes, executive orders, and DOE and/or OEP directives as may become generally applicable at any time;
- Late submission by the sub-grantee to the OEP of DOE reports that are incorrect or incomplete;
- Ineffective or improper use of funds provided under this grant;
- Suspension or termination by DOE of the grant to the state under which this grant is made, or the portion thereof delegated by this grant. The state may also assign and transfer this grant as required by DOE directives.
- If the sub-grantee is unable or unwilling to comply with the terms of this grant or with additional conditions as may be lawfully applied by DOE to the grant, or the state, the sub-grantee may terminate the grant by giving fifteen (15) days written notice to the state signifying the effective date thereof. Furthermore, the residual assets and property purchased by the sub-grantee under this grant shall be transferred at the discretion of the state to an organization which is exempt from Federal income tax as an organization described in Section 501 (c)(3) of the Internal Revenue Code (1954) or to the appropriate federal, state or local government for exclusively public purposes. In such event, the state shall require the sub-grantee to ensure that adequate arrangements have been made for the transfer of all property and finished or unfinished documents, data, studies, and reports purchased by the Grantee under this grant. The sub-grantee shall be entitled to compensation for any unreimbursed expenses reasonably and necessarily incurred in satisfactory performance of the grant. Notwithstanding the above, the sub-grantee shall not be relieved of liability to the state for damages sustained by the state by virtue of any reimbursement to the sub-grantee for the purpose of set-off until such time as the exact amount of damages due the state is determined.
- If the sub-grantee is willing to relinquish all or a portion of the counties that they serve, the sub-grantee must give at least ninety (90) days written notice prior to the end of the program year to the state signifying the effective date thereof. In such event, the state will notify the other sub-grantees (CAAs, and other public and nonprofit entities) for the opportunity to manage the Weatherization Assistance Program in the said counties. Interested sub-grantees must submit to the state within thirty (30) days after notice by OEP, a plan of action and budget to manage the counties up for award. Potential sub-grantees must show experience and performance in weatherization or housing renovation activities, experience in assisting low-income persons in the area to be served, and capacity to undertake a timely and effective weatherization program. Upon selection, the state will hold a public hearing to identify the sub-grantee(s) and amend the State Plan. Failure to relinquish prior to the ninety (90) day deadline will result in the Agency having to maintain the grant for the remainder of current program year and will automatically make them a sub-grantee of the next program year. Relinquishment can only occur between July 1st - February 28th.

#### E. Analysis

All sub-grantees must develop and maintain fiscal and accounting procedures, which conform to both federal and state policy for grants administration. Sub-grantees must also submit monthly Financial Status Reports. In addition, sub-grantees are governed by OMB A-122 for non-profit organizations, which set forth principles for determining allowable costs of programs under grants, contracts, and cooperative agreements with the federal government.

The OEP has established fiscal controls and fund accounting procedures to assure the proper disbursement of all federal funds received by the state. Additionally, the state has established procedures for monitoring the utilization of such funds by project operators.

The controls and procedures to be implemented are as follows:

The State will follow the established fiscal policies and procedures mandated by state law. To accomplish this, the State will coordinate these policies with various other branches of state government as needed. Financial areas addressed in these procedures consist of fiscal management controls, the accounting system, fund controls, personnel and payroll management, property management, procurement, and the disbursement of funds.

The financial standards set forth by the state establish an adequate accounting system with appropriate internal controls which will safeguard assets, check the accuracy and reliability of accounting data, promote operating efficiency and encourage compliance with prescribed management policies.

#### V.8.4 Training and Technical Assistance Approach and Activities

T&TA activities are intended to maintain or increase the efficiency, quality and effectiveness of the Weatherization Program at all levels. Such activities shall be designed to maximize energy savings, minimize production costs, improve program management, crew and contractor quality of



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work, and reduce the potential for waste, fraud, abuse and mismanagement. The state assesses the training needs of its sub-grantees through monitoring visits and state meetings; planned for one field monitoring per sub-grantee and semiannual meetings, funds permitting on the semiannual meetings.

**Methods Used to Provide Training**

- Formal classroom
- On-site training
- Hands-on training
- Certification Training

**Description of Activities to be undertaken:**

ARIZONA WAP formal training is carried out at the FSL SouthWest Building Science Training Center (SWBCTC), which is operated by FSL Home Improvements, a non-profit organization.

The SWBCTC is one of the 15 U.S. Department of Energy "Legacy" weatherization training facilities in the country. It has been instrumental in developing weatherization specific trainings in the southwest and has played a large role in training the weatherization workforce to ensure that the State of Arizona meets its production and contractual obligations. Since 2004, the FSL SWBCTC has provided 30,000 hours of training to 1,730 training candidates. FSL SWBCTC staff has participated in national committees to assist in the development of the National Weatherization Training Guidelines.

The facility provides classroom and onsite laboratory based trainings with a specific emphasis on Weatherization activities and building knowledge, skills and abilities to perform work in the weatherization program. The SWBCTC is the only training facility in Arizona to provide a Weatherization Boot Camp course. In 2010 the FSL SWBCTC received a direct grant from the U.S. Department of Energy to expand its training facility curriculum, increase its outreach through enhanced website and improve its candidate tracking data using specialized classroom registration software. The SWBCTC staff is comprised of industry leaders with decades of technical field experience. They are often recruited to present at regional and national conference training sessions.

The ARIZONA WAP requires that the sub-grantee and its contractors participate in weatherization related trainings that build or enhance their knowledge, skills and abilities to provide weatherization services/energy efficiency retrofits in accordance with the 10CFR, Part 440 and guidelines set out by the U.S. Department of Energy for the Weatherization Assistance Program.

**Current SWBCTC course offerings include:**

- WAP Boot camp – This camp combines Energy 101, Pressure Diagnostic 101, General Thermal Performance, Residential Retrofit Application 101, and Combustion Safety course into a weeklong training course that will provide weatherization professionals with an introduction to energy principles, thermal performance, health and safety standards, LSW, auditing, pressure diagnostics, and field repair. This course provides a combination of classroom and hands-on instructions that will prepare candidates to perform the tasks required of weatherization technicians within the current Weatherization Program Guidelines.
- Energy 101
- Pressure Diagnostics 101
- Combustion Safety
- General Thermal Performance
- REM design
- WAP admin
- Lead RRP Certification
- BPI Certification for Building Analyst
- OSHA 10/30 Certifications
- Energy Auditor Certification
- Installer Certification
- Quality Control Inspector certification(Currently working on this one)
- Success with Weatherization

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Though SWBSTC offers these courses, training for OSHA, BPI and other necessary WAP training can be provide by any qualifying provider for the required certificates.

For details on SWBCTC and courses visit the SWBSTC website at: [www.swbstc.org](http://www.swbstc.org)

Each sub-grantee will be required to maintain training records for its employees and contractors participating in the weatherization program. The training record will list all their training courses they have attended, certifications they possess and date of expiration of those certifications. This information is expected to be updated on an annual basis and provided to OEP.

Arizona WAP will periodically review training performance of sub-grantees by way of sub-grantee self-assessment surveys, on-site monitoring and communication with SWBSTC on specific training deficiencies and needs.

#### **Required Training**

#### **Mobile Homes**

If your agency works on mobile homes or you have contractors that does, at least one person on the job site must hold a Building Performance Institute Certification for Mobile Homes, otherwise no work can be performed on mobile homes.

#### **Crew Leader**

- Renovation, Repair and Painting Rule (RRP)
- OSHA 30 hour training
- Building Performance Institute (BPI) Building Analyst Certification
- Success with Weatherization (Critical Details)
- WAP Boot Camp

#### **Auditor and Inspectors**

- Renovation, Repair and Painting Rule (RRP)
- OSHA 10 hour training
- Building Performance Institute (BPI) Building Analyst Certification
- Success with Weatherization (Critical Details)
- WAP Boot Camp

#### **Quality Control Inspectors**

- Renovation, Repair and Painting Rule (RRP)
- OSHA 30 hour training
- Building Performance Institute (BPI) Building Analyst Certification
- Success with Weatherization (Critical Details)
- WAP Boot Camp

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- Quality Control Certification

**Required- New Field Employees and/or Contractors**

**Within 6 months of Employment**

- WAP Boot Camp
- Renovation, Repair and Painting Rule (RRP)
- OSHA 10 or 30 hour training (Depending on position held)

**Within 1 year of employment**

- Combustion Safety
- Success with Weatherization (Critical Details)

**Tier 1 Training**

Tier 1 training requires all WAP workers, including contractors, to go through a comprehensive training for their specific occupation of work, i.e. Auditor, Crew Chief, Installer, that follows a curriculum that is in line with the Job Task Analysis (JTA) for their occupation. This training will be required to be taken at a facility with a DOE approved accredited training program for the JTA being taught.

Tier 1 training will be based on an annual training schedule for each JTA: Auditor, Crew Chief and Installer. Starting in Program Year 2015, the auditors must take the required training first. The training will be broken down by quarters.

Each quarter of the year the Auditor must attend two or three days of classes in line with the Auditor JTA. By the end of the year they will have completed the entire program and will be tested to make sure they have an understanding of the auditor position and its requirements. Upon completion of this class the WAP auditor will receive a state certificate for WAP auditor that will be effective for two years. Every odd program year they will have to go through the training cycle again and become recertified to continue to be a WAP auditor.

The Crew Chief and Installer must complete the same cycle as the auditor in even program years. OEP will follow BPI's requirement for BPI and QCI certifications. They must gain recertification every three years by attending the required course.

**Tier 2 Training**

Unlike Tier 1 training Tier 2 training does not require an accredited program. Tier 2 training is made up of field training and classroom training. Tier 2 is not a scheduled training, the training will be done when concerns arise during a monitoring visit. If there are consistent issues, the sub-grantees must send workers to training that will address the issues.

Arizona WAP provides sub-grantees with T&TA funding to support attendance and participation at weatherization training events such as the DOE National Weatherization Conference and Energy OutWest Weatherization Conference, which is also considered Tier 2 training. It is expected that essential program personnel attend these conferences to stay current with new regulations, processes and technologies. Arizona WAP is aware that some sub-grantees might have travel restrictions due to budget constraints. It should be noted that funds to pay for sub-grantee travel are provided as part of the Weatherization grant award and proper usage of these funds will be closely monitored by Arizona WAP.

Attendance at state-sponsored training may be required based on the importance of the topic and information to help correct program deficiencies

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or to ensure competence in specific areas. In such cases, sub-grantee and delegate attendance will be required as a matter of program compliance.

#### Contractor Training

Training of contractors is an allowable cost through T&TA funds, though any costs associated with training contractors shall be preceded with a retention agreement in exchange for the training. Reimbursement of labor, mileage, meals and lodging costs for contractors attending trainings is not allowable. Sub-grantees shall consider whether the term of the retention agreement aligns with the cost of training provided.

Whenever possible, the term of a retention agreement shall coincide with the one-year contract (between the Agency and the Contractor) or one-year renewal period. Otherwise, the retention agreement shall be for the duration of the contract from the time the training is provided, not to exceed one year. Training, but not certification as a Lead or Asbestos Company or maintenance of any certifications, may be provided to subcontractors meeting retention requirements. Note that the retention agreement requirement does not apply to Grantee or contractor orientation sessions or when grantees provide instruction to contractors on improving technique as needed.

#### Client Education

Client education activities are encouraged. Sub-grantees have been trained on client education techniques and opportunities. This training is reinforced during field monitoring visits as the monitor is trained to speak with clients about various energy saving (and some non-energy savings) steps they can take such as; changing filters once a month, using compact fluorescent lights, responsible management of their thermostats, water heater temperature usage and settings, combustion appliance safety, moisture control, and lead safety. Sub-grantees are required to distribute the lead booklet, "Renovate Right" (when potential for hazard exists), and mold and moisture awareness, pamphlets "A Brief Guide to Mold, Moisture, and Your Home" to clients prior to weatherization. Client education can occur at different times throughout the process and can include distribution of client educational material at the time of application as well as one-on-one during and post weatherization work by the energy auditor and/or field crew staff. Each agency must determine the best method of ensuring energy education is performed.

### V.9 Energy Crisis and Disaster Plan

The use of weatherization funds to address disaster relief activities are allowed under the following conditions:

1. The dwelling receiving services has an income eligible client/s for weatherization services
2. Dwelling must be in sound and safe condition for the occupant and workers to perform services
3. All work must meet weatherization standards
4. All policies for weatherization must be followed, i.e. client priority, income verification, testing procedures, etc.
5. Health and safety hazard eliminations are allowed only if needed to perform weatherization work
6. Usage of personnel to secure weatherization materials, tools, equipment, weatherization vehicles, or protection of weatherization files during the initial phase of the disaster response

Weatherization vehicles and/or equipment may be used for disaster relief purposes other than weatherization services, as long as WAP is reimbursed according to the DOE financial assistance regulation 10 CFR part 600.

Weatherization funds cannot be used for any activities that will not meet WAP policies and regulations, which would include but not limited to:

1. Providing WAP personnel to assist with disaster relief recovery activities using WAP funds other than weatherization services
2. Removal of debris from dwellings that will not receive weatherization work

The average cost of the dwellings still cannot exceed the average cost per dwelling for the current program year. If you need further guidance please reference Weatherization Program Notice 12-7 located on WAPTAC.org. Also contact OEP if further guidance is needed or if you have questions.